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ABSTRACT OF THE DISCLOSURE

A clamping circuit and method for use in a computer system are provided. In the computer system, a voltage regulator supplies a voltage rail to various components in the system. This voltage rail may be susceptible to voltage spikes or other over-voltage conditions, such as when the voltage rail provides the input voltage to a switching regulator. The clamping circuit comprises a detecting stage and a clamping stage. The detecting stage detects when the voltage rail increases beyond a first voltage level. If this increase is detected, the detecting stage activates the clamping stage, which begins reducing the voltage rail. Once the voltage rail decreases beneath the first voltage level, the detecting stage stops activating the clamping stage. In this way, the clamping circuit protects the computer system from voltage spikes on the voltage rail.